

**Abstract**

The invention relates to a method for monitoring a condition of a patient under anesthesia or sedation, whereupon one, two, three or more signals are acquired, and the signal(s) represent(s) cardiovascular and/or combined electrical biopotential on skull activity of the patient. From said signal or signals are derived or calculated at least two parameter values related to a quantity like waveform amplitude, waveform periodicity, waveform morphology, waveform variability, energy, power, signal complexity and frequency content. A predetermined mathematical index for probability of patient comfort is used, in which function said parameters are variables, and successively changing probability index values of said mathematical index is calculated.